



**WORKING PAPER**

**ASSEMBLY — 40TH SESSION**

**TECHNICAL COMMISSION**

**Agenda Item 30: Other issues to be considered by the Technical Commission**

**INTRODUCTION OF THE CENTRALIZED-OPERATIONAL LOCKS FOR THE AIRCRAFT  
OVERHEAD BINS**

(Presented by the Republic of Moldova)

**EXECUTIVE SUMMARY**

This working paper justifies the need of the new Standards and Recommended Practices (SARPS) introduction to enhance emergency evacuation procedures, particularly by imposing the installation of the centralized-operational locks for the aircraft overhead bins and the modification of the pertinent cabin crew instructions.

**Action:** The Assembly is invited to:

- a) encourage contracting States to recognize that the existing practices and rules with regard to emergency evacuation does not provide the adequate level of regulation to ensure safe and orderly behaviour of the passengers with respect to the hand baggage related issues during the emergency situations, notably the desire of the passengers to retrieve their belongings before leaving the aircraft;
- b) instruct ICAO to initiate elaboration of the SARPS imposing the need of the installation of the centralized-operational locks for the overhead bins, ensuring thereby against unauthorized access during the emergency procedures;
- c) instruct ICAO to determine the regulation gaps and the best mechanism to initiate a review of the cabin baggage related provisions and to amend them accordingly; and
- d) call upon industry standardization bodies and industry to develop appropriate technical solutions and instructions.

<i>Strategic Objectives:</i>	This working paper relates to the Safety Strategic Objective
<i>Financial implications:</i>	The activities referred to in this paper will be undertaken subject to the resources available in the 2020-2022 Regular Programme Budget and/or from extra budgetary contributions.

<i>References:</i>	<i>Annex 6 — Operation of Aircraft</i> <i>Annex 8—Airworthiness of Aircraft</i> <i>Annex 19—Safety Management</i> <i>Airworthiness Manual (Doc 9760)</i> <i>Manual of Procedures for Operations Inspection, Certification and Continued</i> <i>Surveillance (Doc 8335)</i> <i>Cabin Crew Safety Training Manual (Doc 10002)</i> <i>Safety Management Manual (Doc 9859)</i>
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## 1. INTRODUCTION

1.1 During the investigation of number of the aviation accidents and incidents, the existing of the repeated occurrences of passengers ignoring airlines' safety instructions by evacuating aircraft with their hand baggage was proved. While cabin crews are requested to clearly instruct passengers to leave their belongings behind, the reality still proves in numerous cases that a certain number of people ignore the instructions given. Such behaviour is caused by the human nature and instincts; it generates safety risks through slowing the evacuation process, potentially blocking the emergence exits and puncturing and deflating slides. As the practice shows such risks could not be corrected by simple soft means like instructions or requests.

1.2 Airlines have limited influence and abilities to make sure the weight and the dimensions of the hand baggage correspond to the technical requirement of the overhead luggage bins. For instance, with the active use of the self- issues boarding passes, airlines sometimes do not take the weight control of the hand luggage, which makes it little or even impossible to evaluate related risks such a luggage could represent during the evacuation procedures.

1.3 Several expert investigations, including Royal Aeronautical Society of England, European Aviation Safety Agency Study on CS-25 Cabin Safety Requirements, the US National Transportation Safety Board and Federal Aviation Administration reports showed that the willingness of the passengers to access their personal belongings ignoring cabin crew instructions could have a huge negative impact to the safety of the people on board of an aircraft.

## 2. DISCUSSION

2.1 At present, neither ICAO Annex nor ICAO Document contain SARPs for the installation of centralized-operational locks for the overhead bins on the aircrafts.

2.2 At the same time multiple study cases and investigation reports show that in case of the emergency evacuation passengers often interact, voluntarily, by accessing the overhead bins, or not, by dealing with the fallen out bags and clothes, with the hang baggage stored on board of the aircraft. All these creates obstacles and increases the time needed for the passengers' evacuation.

2.3 The technical measure to improve the situation is the introduction of the centralized-operational locks for the overhead bins to allow their lock control, notably during, take-off and landing.

2.4 In order to avoid issues with the access to the emergency equipment by the cabin crew, overhead bins that contain emergency equipment should not be locked.

2.5 The instructions to be given by cabin crew to the passengers should also be modified, first, to reflect the obligatory character of the new standards, underlining the level of liability of the passengers who might not comply with the requirement, second, to clearly explain the new technical mechanism application and the inadmissibility to force the locked bins.

2.6 The cost, weight, complexity, need for an additional maintenance should be carefully measured on the stage of manufacture changes to be applied, but cannot serve as the excuse to lower the acceptable level of safety.

3. **CONCLUSION**

3.1 It can be recognized, that the topic and issue of the centralized-operational locks for the overhead bins has reached a sufficient level of maturity for the ICAO level SARPS to be introduced.

3.2 The corresponding amendments to the ICAO Annexes and Documents have to be elaborated in order to reflect impose and launch of activities needed for the installation the centralized-operational locks for the overhead bins.

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